

REMARKS

Responsive to paragraph 1 of the Office Action concerning the election provisions, for reasons presented below, there are allowable generic claims, such that all of the claims should be considered and allowed in the present application. As to paragraph 2 of the Office Action, these withdrawn claims should be considered and allowed along with their parent generic or linking claims to the elected embodiments. Further, the election was made with traverse.

Responsive to the objection to the drawings, it is noted that the claims are directed to the air conditioning system and the method of operating the air conditioning system for a motor vehicle, and not to a vehicle itself. To the extent that the features of a vehicle referred to in the claims as related to the vehicle air conditioning system, such as the motor and the exhaust, these are illustrated in the drawings. Accordingly, it is submitted that no further drawings of a vehicle or further parts thereof should be required.

Responsive to the objection to the abstract of the disclosure, submitted herewith is a new version which addresses the objections.

Responsive to objections to claims 3, 9 and 13, these claims have been amended as suggested.

Responsive to the rejection of claims under 35 U.S.C. §112, second paragraph, as set forth at section 8 of the Office Action on pages 4-6, the claims have been amended herein to address each of the points raised in these objections. It is submitted that the claims should be considered as clearly in compliance with the requirements of 35 U.S.C. §112, second paragraph. It is

further noted that the amendments herein are directed only to formal matters and not to scope changing language.

The rejection of claims 8, 10, 12, 14 and 19 under 35 U.S.C. §102(b) as being anticipated by Ueda, U.S. Patent No. 5,749,235, is hereby traversed and reconsideration thereof is respectfully requested. The following is a comparison of the present invention and Ueda '235, including a discussion of the features recited in these claims which is a novel as compared to Ueda '235.

The present invention is related to an air conditioning system for a motor vehicle which is operable in an air conditioning mode and at least one of a heat pump operating mode and a reheat operating mode. Further distinguishing features of each of the independent claims, including those included in this rejection based upon Ueda '235 are discussed below.

Independent claim 1 relates to the combination of features, including the last paragraph of claim 1 reciting that there is an internal combustion engine exhaust gas/coolant heat exchanger connected upstream in series to the refrigerant coolant heat exchanger in the coolant cycle. This exhaust gas coolant heat exchanger is illustrated at 16 in Fig. 1 of the drawings and the refrigerant coolant exchanger is designated by reference character 15.

With respect to independent claim 8, a distinguishing feature is the provision of the refrigerant/coolant heat exchanger (see 15) connected upstream in series on the coolant side to a supply air/coolant heat exchanger (see 11) disposed in the supply air channel.

Independent claim 12 recites an air conditioning system that is designed for carrying out a drying operating mode conveyance of drying air for drying the

supply air/refrigerant heat exchanger (see 4) in the air conveying direction, reversed to the supply air conveying direction leading to the vehicle interior, past the supply air/refrigerant heat exchanger (4) with the drying mode being activated at least after shut down of the vehicle having a previous air conditioning or reheat mode operation. Claim 16, in the second to last paragraph recites the relationship where the engine exhaust gas/coolant heat exchanger is connected upstream in series to the refrigerant heat exchanger in the coolant cycle (see comments for a similar feature in claim 1).

Claim 19 is a method claim having the distinguishing feature discussed above with respect to claim 8.

Claim 20 is a method claim directed to the drying operating mode feature discussed above with respect independent claim 12.

Ueda '235 relates to an air condition for a vehicle which includes a heat pump system for heating and cooling. Ueda '235 fails to disclose or suggest any of the above discussed distinguishing features of each of the independent claims. As to the rejected claim 8 based upon Ueda '235, there is no disclosure of the combination recited, including the connection of a refrigerant/coolant heat exchanger upstream in series on the coolant side to the supply air/coolant heat exchanger disposing the supply air channel. Compare the specification, including a detailed description at page 10, lines 3-17. Claim 10 depends from and further limits claim 8.

Claim 12 recites the drying operating mode, a feature that is also neither disclosed nor suggested by Ueda '235.

Claim 16, like claim 1 discussed above, includes the feature of the engine exhaust gas coolant heat exchanger (16) connected upstream in series to the refrigerant/coolant heat exchanger (15). This feature is especially advantageous in that it provides for the utilization of not only the waste heat generated by the internal combustion engine itself, but also the heat of the exhaust gas. Claim 14 depends from claim 12 and further limits the same and therefore is also clearly novel with respect to Ueda '235.

Claim 19 is clearly novel as compared to Ueda '235 by providing the above discussed features concerning the drying operating mode and related method steps.

Since each of these claims 8, 10, 12, 14 and 19 are clearly novel as compared to Ueda '235, this rejection under 35 U.S.C. §102(b) should be reconsidered and withdrawn.

It is further submitted that the features of the combinations set forth in each of these claims 8, 10, 12, 14 and 19 are advantageous as described above and in the original application specification, are not suggested or taught by the disclosure related to Ueda '235, and therefore these claims are clearly unobvious within the intent of 35 U.S.C. §103 as compared to the Ueda '235 arrangement.

The rejection of claims 1, 4, 8, 10, 12, 14 and 16 under 35 U.S.C. §102(b) as being anticipated by Tanaka et al., U.S. Patent No. 5,878,589 is also hereby traversed and reconsideration thereof is respectfully requested.

Like Ueda '235, Tanaka '589 relates to a vehicular air conditioning system. The Tanaka et al. arrangement is specifically for electric vehicles and therefore includes no suggests whatsoever regarding the use of internal

combustion engine exhaust gases in an exhaust gas coolant heat exchanger of the type claimed in independent claims 1 and 16. Accordingly, the rejection of claims 1 and 16 as anticipated by Tanaka et al. '589 is clearly inappropriate and should be reconsidered and withdrawn. Claim 4, dependent upon claim 1 is likewise clearly not anticipated by Tanaka et al. '589.

With respect to claim 8, it is noted that Tanaka et al. '589 does not disclose or suggest an air/coolant heat exchange such as 11 which is arranged in the air feeding duct to the vehicle occupant interior. Accordingly, a refrigerant/coolant heat exchanger (see 15 in the current application) can also not be connected in series with such an air-coolant heat exchanger (11) of the present application. Accordingly, this claim 8 is independent therefrom is clearly novel as compared to Tanaka et al. '589 and this rejection should be reconsidered and withdrawn.

With respect to claim 12, Tanaka et al. '589 does not disclose a drying operating mode in which an air/refrigerant heat exchanger is dried by the reversal of the air flow direction as recited in this claim 12. Accordingly, the rejection under 35 U.S.C. §102 of this claim 12 based upon Tanaka et al. should be reconsidered and withdrawn. Claim 14 depends from and further limits claim 12, and is likewise clearly a novel thereof over the Tanaka et al. '589 patent disclosure.

As to claim 16, Tanaka et al. '589 does not describe an air/coolant heat exchanger (such as 11) arranged in the air feeding duct for the vehicle occupant interior and therefore as claim 16, as well as independent claim 19, is novel with respect to Tanaka et al. '589.

In view of the above discussed differences between the rejected claims and the Tanaka et al. '589 patent disclosure, the rejection of these claims under 35 U.S.C. §102(b) should be reconsidered and withdrawn.

It is further submitted that there are no teachings or motivations in Tanaka et al. '589 that would make one skilled in the art to make the modifications necessary to meet the terms of these claims within the intent of 35 U.S.C. §103.

With respect to the note regarding reference to the foreign priority papers to overcome the rejection of Tanaka et al. '589, it is noted that applicant understands that the date of the Tanaka et al. reference is early enough to be a proper prior art reference, except for lack its lack of disclosure of the claim combinations.

With respect to the non application of art against claims 2, 3, 9, 13 and 17 on the basis that these claims were indefinite and could not be examined on the merits, it is submitted that the claims presently in the application are clearly definite and also are clearly novel and unobvious as compared to the prior art relied on in the Office Action rejections.

In view of the foregoing amendments and remarks, reconsideration and favorable action on all of the claims is in order and respectfully requested.

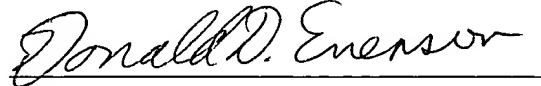
If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit
Account No. 05-1323 (Docket #027/49419).

Respectfully submitted,

March 7, 2003



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